Abstract

A method for the detection and treatment of disordered breathing
during sleep employs an artificial neural network (ANN) in which data

5   related to breathing gas flow are analyzed. A respiratory circuit is
established by connecting the patient to a continuous positive airway
pressure (CPAP) system with pressurized breathing gas supply, the
gas flow in the circuit is periodically sampled, one or several
cepstrum parameters distinctive of various breathing patterns are

10   periodically calculated; the parameter values are periodically fed to
an ANN trained to recognize breathing patterns characteristic of sleep
disordered breathing and are analyzed in the network, the CPAP
pressurized breathing gas supply is controlled in response to the ANN
output. Also disclosed is a corresponding apparatus.

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